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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,354	12/19/2005	Edward G. Shifrin	P/826-9	9700
2352 7590 11/29/2007 OSTROLENK FABER GERB & SOFFEN 1180 AVENUE OF THE AMERICAS NEW YORK, NY 100368403			EXAMINER CUMBERLEDGE, JERRY L	
			ART UNIT 3733	PAPER NUMBER
			MAIL DATE 11/29/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/561,354

Applicant(s)

SHIFRIN ET AL.

Examiner

Jerry Cumberledge

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 and 33-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 and 33-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-12 and 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oberlander (US Pat. 6,554,852 B1) in view of Fenton, Jr. (US Pat. 6,056,751).

Oberlander discloses a sternal closure system for reapproximating left and right halves of a patient's longitudinally incised sternum during a surgical procedure in the thoracic cavity, the system comprising: a first, at least one anchor means (Fig. 2, ref. 20, left), adapted to be disposed inside the left half of the sternum; a second, at least one anchor means (Fig. 2, ref. 20, right), adapted to be disposed inside the right half of the sternum so as to facilitate separation of the left and right halves of the sternum when necessary; at least one fixing means (Fig. 1, ref. 30) adapted for rigidly and releasably connecting said first, at least one anchor means, disposed within the left half of sternum, to said second, at least one anchor means disposed within the right half of sternum; an apparatus (Fig. 12, ref. 100) for simultaneous placing in the sternum said first, at least one anchor means, adapted for disposing within the left half of sternum, and said second, at least one anchor means, adapted to be disposed within the right half of sternum; a fixing apparatus (Fig. 12, ref. 120) for placing said fixing means

adapted for rigidly connecting to one another said first, at least one anchor means, adapted to be disposed within the left half of sternum and said second, at least one anchor means, adapted to be disposed within the right half of sternum; an apparatus (Fig. 6, ref. 32) for removing said fixing means when it is necessary to perform a post-operative surgical procedure in the thoracic cavity, whereby there is performed a rigid connection to one another of the left and the right halves of a patient's incised sternum during a surgical procedure within the thoracic cavity, facilitating separation of the left and right halves of sternum closed in this way, in case of post-operative emergency surgical procedures. The first, at least one anchor means, adapted to be disposed within the left half of the sternum, and said second, at least one anchor means, adapted to be disposed within the right half of sternum, are screws (Fig. 3, ref.21) having an external thread (Fig. 3, ref. 35) of one direction. The first, at least one anchor means, adapted to be disposed within the left half of sternum, and said second, at least one anchor means, adapted to be disposed within the right half of sternum, have heads provided with means for grasping and rotating them by said apparatus for simultaneous placing of said anchor means (column 5, lines 56-60).

The heads of said first and said second anchor means are provided with means for their grasping by said apparatus for simultaneously placing said anchor means, said grasping means being generally shaped as grooves on the side surface of said heads (column 5, lines 60-67). The heads of said first and said second anchor means are provided with means for their rotation by said apparatus for simultaneously placing said anchor means, and these means for their rotation are generally cross-shaped slots

(column 5, lines 60-67) on the end surface of said heads. The heads of said first and said second anchor means are provided with means for their rotation by said apparatus for simultaneous placing of said anchor means, and these means for rotation are substantially shaped as hexahedral holes (column 5, lines 60-67) in the end face of said heads.

At least one fixing means (Fig. 1, ref. 30) adapted for rigidly connecting to one another said first, at least one anchor means, disposed within the left half of sternum to said second, at least one anchor means disposed within the right half of sternum is substantially shaped as a staple (Fig. 3, ref. 31) having a body (the middle portion of ref. 31) and at least two legs emerging from this body (the areas of ref. 31 closer to the screws) in a substantially perpendicular relationship (Fig. 13), whereby said staple is adapted for rigidly connecting said first, at least one anchor means, to said second, at least one anchor means.

Both said first, at least one anchor means, adapted to be disposed in the left half of the sternum, and said second, at least one anchor means, adapted to be disposed in the right half of the sternum, both have an inner axial passage (Fig. 2, ref. 25) adapted for disposing therein, substantially tightly, one of the corresponding legs of said staple.

The at least one fixing means is formed as a staple having a curved body (Fig. 3, ref. 31) and at least two slightly curved legs (Fig. 3, the portions of ref. 31 closer to the screws) for tightly disposing in a respective inner axial passage of said first, at least

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one anchor means adapted to be disposed in the left half of sternum, and said second, at least one anchor means adapted to be disposed in the right half of sternum.

The first, at least one anchor means, adapted to be disposed within the left half of sternum, said second, at least one anchor means, adapted to be disposed within the right half of sternum, and said at least one fixing means, are all made of FDA approved metal or alloy (column 6, lines 30-31), mainly of one of metal or alloy of the group, consisting of stainless steel (column 6, lines 30-31), titanium (column 6, lines 30-31), tantalum, alloys of titanium and tantalum.

The first, at least one anchor means, adapted to be disposed within the left half of sternum, said second, at least one anchor means, adapted to be disposed within the right half of sternum, and said at least one fixing means, are all made from FDA approved biodegradable material (column 6, lines 18-30).

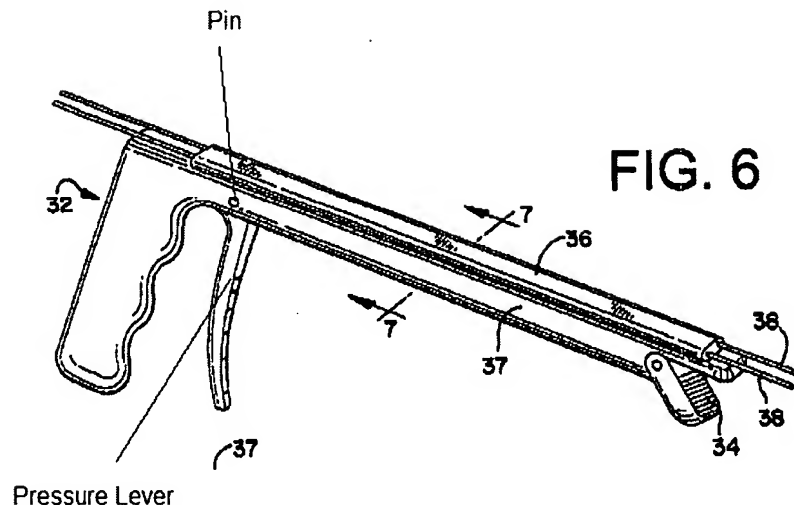
The apparatus for simultaneously placing in the sternum said first, at least one anchor means, adapted to be disposed within the left half of sternum, and said second, at least one anchor means, adapted to be disposed within the right half of sternum, comprises a frame means (Fig. 12, ref. 104) with vertical guides (Fig. 12, ref. 102).

The apparatus for simultaneously placing in the sternum said first, at least one anchor means adapted to be disposed within the left half of sternum, and said second, at least one anchor means adapted to be disposed within the right half of sternum, contains a frame means (Fig. 12, ref. 104) with two horizontal plates disposed in parallel relationship to each other (the top plate which can be seen in the drawing and the plate

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underneath the top plate) and at least one vertical guide (Fig. 12, ref. 102) rigidly connected at least with one of these plates.

Oberlander further discloses an apparatus for removing said fixing means when it is necessary to perform a post-operative surgical procedure within the thoracic cavity containing: a hollow body (Fig. 6, ref. 36 and 37) (column 7, lines 57-58) provided with a handle (near ref. 32) extending therefrom, and in its lower part with a bifurcated stop (the bottom portions of the two separate halves of the handle); a grasping member (Fig. 8, ref. 34) movably disposed within this body; a pressure lever (Fig. 6 below) pivotally mounted on a pin (Fig. 6 below) within the upper part of the hollow body, this pressure lever has a handle extending substantially in the same direction as said handle of hollow body (Fig. 6, ref. 36 and 37) (column 7, lines 57-58) and a free end located within the hollow body and operatively connected to said spring-loaded grasping member. There must be a connection inside that connects the handle to the grasping portion; otherwise there would be no way to operate the grasper with the handle.



The device of Oberlander is capable of performing a sternal closure method for reapproximating a patient's left and right sternal halves during a surgical procedure in the thoracic cavity including the following successive steps: penetrating, before incising the sternum into left and right halves, at least one pair of anchor means in such a manner, that one of them is placed in the future left half of the sternum, and the second in the future right half of the sternum, one of anchor means in this pair being said first, at least one, anchor means adapted to be disposed within the left half of sternum, and the second of anchor means in this pair being the second, at least one anchor means, adapted to be disposed within the right half of sternum; repeating the procedure of placing said pairs of anchor means as many times as it is necessary to provide, on completion of a surgical procedure, a secure connection of the left and right halves of

sternum; separating the sternum, by a surgical procedure, into left and right halves, and performing the surgical operation; reapproximating, on completion of the surgical operation within the thoracic cavity, the left and right halves of sternum, using conventional techniques; grasping said first and said second anchor means by their heads, bringing them towards one another, and thereby reapproximating, at a necessary distance, the left and right halves of the incised sternum; placing and fixing tightly the fixing means to secure the heads of said first and said second anchor means and creating thereby a rigid connection of the left and right halves of the incised sternum; repeating the procedure of placing the fixing means as many times as there are respective pairs of anchor means required to provide, on completion of a surgical operation, a secure connection of the left and right halves of sternum.

Oberlander discloses the claimed invention except for the rigid fixing means having two legs, at least one leg being adapted for insertion in one of said axial passages.

Fenton, Jr. discloses a sternal closure system (Fig. 10) that comprises two anchor means (Fig. 10, refs. 12) having axial passages (Fig. 10, ref. 50) and at least one rigid (column 5, lines 60-67 and column 6, lines 1-6) fixing means (Fig. 10, ref. 60) adapted to be inserted in one of said axial passages (Fig. 10). The fixing means is attached to the anchor means through application of energy (column 6, lines 33-38), which allows the fixing means to be set to a desired tension and/or create a desired size for the tissue capture region, thus adding more adjustability to the device (column 6, lines 38-41).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have constructed the sternal closure system of Oberlander with the rigid fixing means adapted to be inserted into the axial passage as taught by Fenton, Jr., in order to allow the fixing means to be set to a desired tension and/or create a desired size for the tissue capture region, thus adding more adjustability to the device (column 6, lines 38-41).

With regard to claim 3, Oberlander in view of Fenton, Jr. disclose the claimed invention except for the screws having an external thread of different directions. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have constructed the screws having an external thread of different directions, since it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. In re Einstein, 8 USPQ 167.

Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oberlander (US Pat. 6,554,852 B1) in view of Fenton, Jr. (US Pat. 6,056,751) in view of Sasaki et al. (US Pat. 5,735,183).

Oberlander discloses the claimed invention except for the apparatus for simultaneously placing in the sternum first, at least one anchor means, and said second, at least one anchor means, comprising: a power means to generate a torque; a means for transmitting torque simultaneously to said first and said second anchor means; a means for searching and grasping simultaneously said first and said second anchor means; a means for retaining and simultaneously delivering said first and said

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second anchor means to said means for their searching and grasping. The power means for generating a torque comprises one of the means of a group including an electric, pneumatic or hydraulic engine. The means for transmitting torque simultaneously to said first and said second anchor means is generally a gear box having one drive shaft and at least two driven shafts. On the driven shafts of said gearbox there are mounted spring-loaded heads forming said means for searching and grasping simultaneously said first and said second anchor means.

Sasaki et al. disclose an apparatus comprising: a power means to generate a torque (column 5, lines 56-60); a means for transmitting torque (column 5, lines 57-60); a means for searching and grasping (Fig. 13a, the areas attached to spring 64 and attached to the unlabeled spring on the opposite side of the device); a means for retaining and delivering said first and said second anchor means to said means for their searching and grasping (Fig. 13a, ref. 3). The power means for generating a torque comprises one of the means of a group including an electric, pneumatic or hydraulic engine (column 1, lines 14) (column 5, lines 56-60). The means for transmitting torque to said first and said second anchor means is generally a gear box having one drive shaft (column 5, lines 57-60). On the driven shaft (Fig. 13c, ref. 7) of said gear box there are mounted spring-loaded heads (Fig. 13a, the areas attached to spring 64 and attached to the unlabeled spring on the opposite side of the device) forming said means for searching and grasping said first and said second anchor means. The apparatus is used as a power screwdriver (column 1, lines 6-7).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified the apparatus for simultaneous placing of Oberlander with the power means to generate a torque; a means for transmitting torque; a means for searching and grasping; a means for retaining and delivering said first and said second anchor means to said means for their searching and grasping; the power means for generating a torque comprising one of the means of a group including an electric, pneumatic or hydraulic engine; the means for transmitting torque to said first and said second anchor means is generally a gear box having one drive shaft; on the driven shaft of said gear box there are mounted spring-loaded heads forming said means for searching and grasping said first and said second anchor means of Sasaki et al. The apparatus of Oberlander could then be used as a power screwdriver Sasaki et al., column 1, lines 6-7), and the apparatus could then be used to engage the screwdriver ready heads of the screws of Oberlander (Oberlander, column 5, lines 56-68).

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oberlander (US Pat. 6,554,852 B1) in view of Fenton, Jr. (US Pat. 6,056,751) in view of Sasaki et al. (US Pat. 5,735,183) in view of Runck et al. (US Pat. 3,832,139).

Oberlander in view of Sasaki et al. discloses the claimed invention except for the means for retaining and simultaneous delivering of said first and said second anchor means to said means for their searching and grasping contains two spring-loaded rotary drums disposed between the plates within said frame means.

Runck et al. discloses means for retaining and simultaneous delivering of said first and said second anchor means to said means for their searching and grasping contains two spring-loaded (column 5, lines 50-54) rotary drums (Fig. 4, ref. 80 and 81) disposed between the plates within said frame means (Fig. 4, ref. 82), for permitting insertion and withdrawal of a pair of plungers (column 4, lines 57-59).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have constructed the means for retaining and simultaneous delivering of said first and said second anchor means to said means for their searching and grasping of Oberlander in view of Sasaki et al. with the two spring-loaded rotary drums disposed between the plates within said frame means of Runck et al., in order to permit insertion and withdrawal of a pair of plungers (column 4, lines 57-59), which could be used to deliver the anchors of Oberlander (Fig. 2, ref. 20) to tissue (Oberlander, abstract, lines 3-5).

Claims 1-19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oberlander (US Pat. 6,554,852 B1) in view of Fenton, Jr. (US Pat. 6,056,751) in view of Sasaki et al. (US Pat. 5,735,183) in view of Runck et al. (US Pat. 3,832,139).

Oberlander in view of Sasaki et al. discloses the claimed invention except for the means for retaining and simultaneous delivering of said first and said second anchor means to said means for their searching and grasping comprising a spring-loaded cartridge means disposed within said frame means.

Runck discloses the means for retaining and simultaneous delivering of said first and said second anchor means to said means for their searching and grasping comprising a spring-loaded (column 5, lines 50-54) cartridge means (Fig. 4, ref. 80, 81, 84, 85, 87, and 86) disposed within said frame means (Fig. 4, ref. 82),

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have constructed the means for retaining and simultaneous delivering of said first and said second anchor means to said means for their searching and grasping of Oberlander in view of Sasaki et al. with the spring-loaded cartridge means disposed within said frame means of Runck et al., in order to permit insertion and withdrawal of a pair of plungers (column 4, lines 57-59), which could be used to deliver the anchors of Oberlander (Fig. 2, ref. 20) to tissue (Oberlander, abstract, lines 3-5).

Claims 1-12 and 22-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oberlander (US Pat. 6,554,852 B1) in view of Fenton, Jr. (US Pat. 6,056,751) in view of Bone (US Pat. 3,875,648).

Oberlander discloses the claimed invention except for the fixing apparatus as described in claims 22-30.

Bone discloses a fixing apparatus for placing and removing said fixing means adapted for rigidly securing to one another said first, at least one anchor means, adapted to be disposed within the left half of sternum and said second, at least one anchor means, adapted to be disposed within the right half of sternum comprising: at

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least two levers, first and second (Fig. 27, below) each of them having a proximal end and a distal end, these levers being pivotally connected to one another (column 3, lines 21-22) (column 3, lines 27-29) and provided with handles at their distal ends (Fig. 27, below) and means for grasping heads of anchor means at their proximal ends (Fig. 27, below); at least one third lever (Fig. 42 below) pivotally connected to said first lever or said second lever and provided with a handle at its distal end (Fig. 42 below), and at its proximal end with a means for delivering the fixing means inside said first and said second anchor means (Fig. 42 below), formed substantially as a pusher (Fig. 48, ref. 242, 243 and 186) (column 11, lines 22-28); a means for retaining and by the piece delivering of fixing means (Fig. 42 below), formed substantially as a movable spring-loaded die (Fig. 48, ref. 243, 241 and 210) with slots (Fig. 41. ref. 198) for disposing fixing means.

The means for grasping the heads of anchor means are formed as two protrusions facing one another (Fig. 27 below), one of them being disposed at the proximal end of first lever, and the second at the proximal end of the second lever, and these protrusions have, at their free ends, recesses (Fig. 27 below) matching in shape the grooves on the side surface of heads of said anchor means. The fixing apparatus comprises at least one third lever (Fig. 42 below) pivotally connected to said first lever or with said second lever (column 10, lines 44-45) and spring-loaded relative (Fig. 48, ref. 243, 241 and 210) to this first or second lever, said third lever being provided with a handle (Fig. 42 below) at its distal end, and at its proximal end with a means for delivering the fixing means inside said first and said second anchor means (Fig. 42

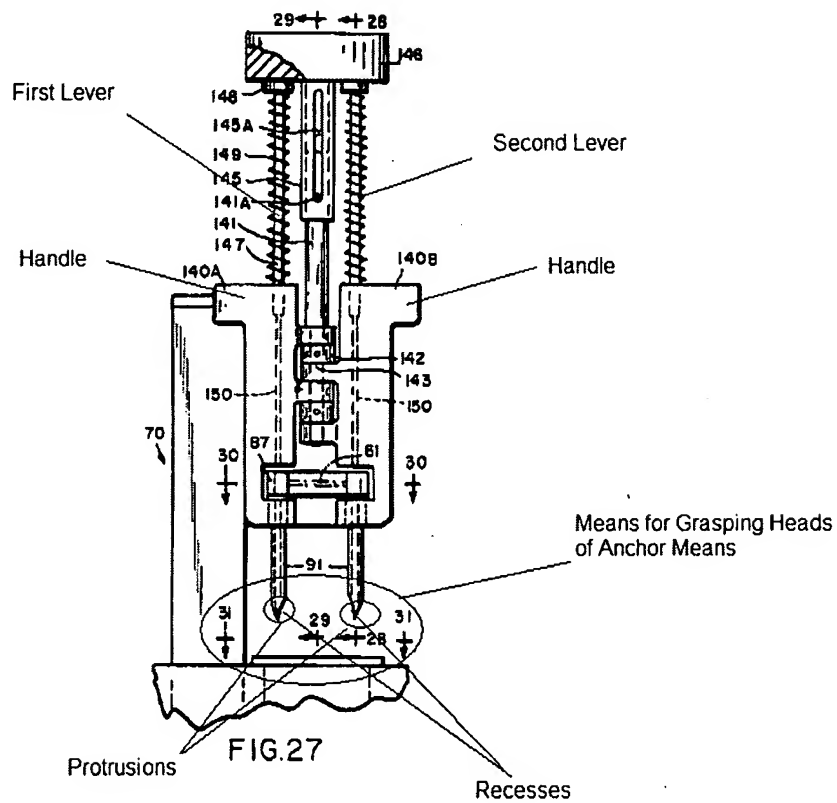
below), which is shaped substantially as a pusher (Fig. 48, ref. 242, 243 and 186) (column 11, lines 22-28). The fixing apparatus has a means for retaining and by the piece, delivering of fixing means (Fig. 42 below), comprising generally a movable spring-loaded die (Fig. 48, ref. 243, 241 and 210) with slots for disposing these fixing means, this die being adapted to perform stepping linear movement in a guide, which is rigidly connected to said first lever or to said second lever of said fixing apparatus.

The fixing apparatus for placing said fixing means adapted for rigidly connecting together said first, at least one anchor means adapted to be disposed within the left half of sternum and said second, at least one anchor means adapted to be disposed within the right half of sternum, this fixing apparatus comprising: at least two levers, the first and the second (Fig. 27 below), each of them having a proximal end and a distal end, these levers are pivotally connected to one another (column 3, lines 21-22) (column 3, lines 27-29) and provided with handles at their distal ends (Fig. 27 below), as well as with means for grasping the heads of anchor means at their proximal ends (Fig. 27 below); at least one third lever (Fig. 42 below) pivotally (column 10, lines 44-45) connected to a bearing plate (Fig. 42, ref. 179) rigidly secured on said first lever or said second lever, this third lever is provided with a handle at its free end (Fig. 42 below), and pivotally connected by its middle to the means for delivering the fixing means inside said first and said second anchor means formed substantially as a pusher (Fig. 48, ref. 242, 243 and 186) (column 11, lines 22-28); a means for retaining and by the piece delivering of fixing means (Fig. 42 below) formed substantially as a cartridge enclosing spring-loaded fixing means located right up to one another.

The fixing apparatus contains at least two levers, the first and the second (Fig. 27 below), each of them having a proximal end and a distal end, these levers are pivotally connected to one another (column 3, lines 21-22) (column 3, lines 27-29) and provided with handles at their distal ends (Fig. 27 below), means for mutually fixing the handles when brought together, as well as by means for grasping the heads of anchor means at their proximal ends. The button and button holes can be considered the means for mutually fixing the handles when brought together, since, when the levers are pivoted together, they could be held in that position by the button once the levers are placed through the button holes (column 10, lines 27-33). If the levers are held in position, then so are the handles, which are attached to the levers (Fig. 27, below). The means for grasping the heads of anchor means are configured as two protrusions (Fig. 27 below) facing one another, one of which is disposed at the proximal end of the first lever, and the second at the proximal end of the second lever, and these protrusions have at their free ends recesses (Fig. 27 below) matching in shape the grooves on the side surface of heads of said anchor means. The fixing apparatus contains a single unit including at least one third lever (Fig. 42 below), a means for retaining and by the piece delivery of fixing means (Fig. 42 below) formed substantially as a cartridge, and a means for delivering a fixing means inside said first and said second anchor means formed substantially as a pusher (Fig. 42 below); this single unit is pivotally (column 10, lines 44-45) connected to the bearing plate rigidly mounted on said first lever or said second lever and is capable of folding back in the vertical plane to provide viewing of said means for grasping the anchor means or returning into operative position with

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simultaneous rigid fixing of the cartridge at the proximal ends of said first and second levers of the fixing apparatus.



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spring to make it spring loaded, in order to return the grasping member to an original position once an external force is removed (column 12, lines 10-13).

Response to Arguments

Applicant's arguments with respect to claims 1-31 and 33-35 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

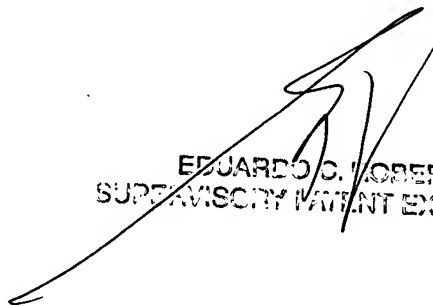
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry Cumberledge whose telephone number is (571) 272-2289. The examiner can normally be reached on Monday - Friday, 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on (571) 272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JLC



EDUARDO C. ROBERT
SUPERVISORY PATENT EXAMINER